



Figure 1

## Figure 2A

1 **MALTFALLVA LLVLSCCKSSC SVGCDLPQTH SLGSRRTLML LAQMRKISLF SCLKDRHDFG**  
61 **FPQEEFGNQF QKAETIPVLH EMIQQIFNLF STKDSSAAWD ETLLDKFYTE LYQQLNDLEA**  
121 **CVIQGVGVTE TPLMKEDSIL AVRKYFQRIT LYLKEKKYSP CAWEVVRAEI MRSFSLSTNL**  
181 **QESLRSKE**

## Figure 2B

1 gagaacctgg agcctaaggt ttaggctcac ccatttcaac cagtctagca gcatctgcaa  
61 catctacaat ggccttgacc tttgctttac tgggtggccct cctgggtgctc agctgcaagt  
121 caagctgctc tgtgggctgt gatctgcctc aaaccacag cctgggtagc aggaggacct  
181 tgatgctcct ggcacagatg aggagaatct ctcttttctc ctgcttgaag gacagacatg  
241 actttggatt tccccaggag gagtttgga accagttcca aaaggctgaa accatccctg  
301 tcctccatga gatgatccag cagatcttca atctcttcag cacaaaggac tcatctgctg  
361 cttgggatga gacctccta gacaaattct acactgaact ctaccagcag ctgaatgacc  
421 tggaagcctg tgtgatacag ggggtggggg tgacagagac tccctgatg aaggaggact  
481 ccattctggc tgtgaggaaa tacttccaaa gaatcactct ctatctgaaa gagaagaaat  
541 acagcccttg tgccctgggag gttgtcagag cagaaatcat gagatctttt tctttgtcaa  
601 caaacttgca agaaagttaa agaagtaagg aatgaaaact ggttcaacat ggaaatgatt  
661 ttcattgatt cgtatgccag ctcacctttt tatgatctgc catttcaaag actcatgttt  
721 ctgctatgac catgacaoga tttaaatctt ttcaaagtgt tttaggagta ttaatcaaca  
781 ttgtattcag ctcttaaggc actagtcctt tacagaggac catgctgact gatccattat  
841 ctattttaaat atttttaaaa tattatttat ttaactattt ataaaacaac ttatttttgt  
901 tcatattatg tcatgtgcac ctttgacag tggttaatgt aataaaatgt gttctttgta  
961 tttggtaaat ttattttgtg ttgttcattg aacttttgct atggaacttt tgtacttggt  
1021 tattctttta aatgaaattc caagccta at tgtgcaacct gattacagaa taactggtac  
1081 acttcatttg tccatcaata ttatattcaa gatataagta aaaataaact ttctgtaaac  
1141 ca

### Figure 3A

1 MTNKCLLQIA LLLCFSTTAL SMSYNLLGFL QRSSNFQCQK LLWQLNGRLE YCLKDRMNF  
61 IP EEIKQLQQ FQKEDAALTI YEMLQNIFAI FRQDSSSTGW NETIVENLLA NVYHQINHLK  
121 TVLEEKLEKE DFTRGKLMSS LHLKRYYGRI LHYLKAKEYS HCAWTIVRVE ILRNFYFINR  
181 LTGYLRN

### Figure 3B

1 atgaccaaca agtgtctcct ccaaattgct ctctgttgt gcttctccac tacagctctt  
61 tccatgagct acaacttgct tggattccta caaagaagca gcaattttca gtgtcagaag  
121 ctctgtggc aattgaatgg gaggcttgaa tattgcctca aggacaggat gaactttgac  
181 atccctgagg agattaagca gctgcagcag ttccagaagg aggacgccgc attgaccatc  
241 tatgagatgc tccagaacat ctttgctatt ttcagacaag attcatctag cactggctgg  
301 aatgagacta ttgttgagaa cctcctggct aatgtctatc atcagataaa ccatctgaag  
361 acagtcctgg aagaaaaact ggagaaagaa gattttacca ggggaaaact catgagcagt  
421 ctgcacctga aaagatatta tgggaggatt ctgcattacc tgaaggccaa ggagtacagt  
481 cactgtgcct ggaccatagt cagagtggaa atcctaagga acttttactt cattaacaga  
541 cttacagggtt acctccgaaa ctgaagatct cctagcctgt ccctctggga ctggacaatt  
601 gcttcaagca ttcttcaacc agcagatgct gtttaagtga ctgatggcta atgtactgca  
661 aatgaaagga cactagaaga ttttgaaatt tttattaaat tatgagttat ttttatttat  
721 ttaaatttta ttttgaaaaa taaattattt ttggtgc

## Figure 4A

1 **MKYTSYILAF QLCIVLGS LG** CYCQDPYVKE AENLKKYFNA GHSDVADNGT LFLGILKNWK  
61 EESDRKIMQS QIVSFYFKLF KNFKDDQSIQ KSVETIKEDM NVKFFNSNKK KRDDFEKLTN  
121 YSVTDLNVQR KAIHELIOVM AELSPA AKTG KRKRSQMLFR GRRASQ

## Figure 4B

1 tgaagatcag ctattagaag agaaagatca gttaagtcct ttggacctga tcagcttgat  
61 acaagaacta ctgatttcaa cttctttggc ttaattctct cggaacgat gaaatataca  
121 agttatatct tggcttttca gctctgcac gttttgggtt ctcttggtcg ttactgccag  
181 gacccatatg taaaagaagc agaaaacctt aagaaatatt ttaatgcagg tcattcagat  
241 gtagcggata atggaactct tttcttaggc attttgaaga attggaaaga ggagagtgac  
301 agaaaaataa tgcagagcca aattgtctcc ttttacttca aactttttaa aaactttaaa  
361 gatgaccaga gcatccaaaa gagtgtggag accatcaagg aagacatgaa tgtcaagttt  
421 ttcaatagca acaaaaagaa acgagatgac ttcgaaaagc tgactaatta ttcggttaact  
481 gacttgaatg tccaacgcaa agcaatacat gaactcatcc aagtgatggc tgaactgtcg  
541 ccagcagcta aaacagggaa gcgaaaaagg agtcagatgc tgtttcaagg tcgaagagca  
601 tcccagtaat ggttgtcctg cctgcaatat ttgaatttta aatctaaatc tatttattaa  
661 tatttaacat tatttatatg gggaatatat ttttagactc atcaatcaaa taagtattta  
721 taatagcaac ttttgtgtaa tgaaaatgaa tatctattaa tatatgtatt atttataatt  
781 cctatatact gtgactgtct cacttaatcc tttgttttct gactaattag gcaaggctat  
841 gtgattacaa ggctttatct caggggccaa ctaggcagcc aacctaagca agatcccatg  
901 ggttgtgtgt ttatttcaact tgatgataca atgaacactt ataagtgaag tgatactatc  
961 cagttactgc cggtttgaaa atatgcctgc aatctgagcc agtgctttta tggcatgtca  
1021 gacagaactt gaatgtgtca ggtgacctg atgaaaacat agcatctcag gagatttcat  
1081 gcctggtgct tccaaatatt gttgacaact gtgactgtac ccaaaggaa agtaactcat  
1141 ttgttaaaat tatcaatata taatatatat gaataaagtg taagttcaca act